IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Johan Cornelis Talstra, et al.

Title: COPY PROTECTION SYSTEM

Serial No. 09/853,174

Filed: May 10, 2001

Confirmation No.: 5915

Group Art Unit: 2134

Examiner: Piotr Poltorak

Honorable Commissioner of Patents and Trademarks

Alexandria VA. 22313-1450

Sir:

REPLY BRIEF UNDER 37 C.F.R. § 41.41

This paper contains a Reply Brief under the provisions of 37 C.F.R. §41.41 in response to the Examiner's Answer mailed May 7, 2007.

The appellants graciously acknowledge the withdrawal of the rejection of claims 10-12 and 21-22 under the provisions of 35 U.S.C. §112, second paragraph. The remaining grounds of appeal are discussed below.

Grounds of Rejection to be Reviewed on Appeal

The rejection of claims 1-3 and 13-20 under the provisions of 35 U.S.C. §102(a) as being anticipated by an article within C.B.S. Proceedings of the IEEE, Volume: 87, Issue: 7, July 1999, pp. 1267-1276), entitled Copy protection for DVD video", authored by Bloom, J.A.; Cox, I.J.; Kalker, T.; Linnartz, J.-P.M.G.; Miller, M.L.; Traw, (hereinafter *Bloom et al.*).

The rejection of claims 4-7, 10-11 and 21-22 under the provisions of 35 U.S.C. §103(a) as being obvious over International Publication No. WO 99/11020 (hereinafter *Glogau et al.*) in view *Bloom et al.* and further in view of U.S. Patent No. 5,940,134 issued to Wirtz (hereinafter *Wirtz*).

The rejection of appealed Claims 1-3 and 13-20 as being anticipated under the provisions of 35 U.S.C. §102(a) by *Bloom et al.*

The Examiner's Answer, beginning on the bottom of page 8 responds to the Appeal Brief filed by the appellants. The examiner reiterates the position that *Bloom et al.* teach each and every element within appealed claims 1-3 and 13-20. The appellants do not concur with the rationale applied by the examiner for the reasons stated below.

In responding to the assertions made by in the Appeal Brief, the Examiner's Answer on page 9 states that appellants are attempting to find a literal citation within *Bloom et al.* for the subject matter defined by the appealed claims. Thus, the Examiner's Answer does not appear to allege that the teaching of *Bloom et al.* expressly anticipate the appealed claims. This would be consistent with statements made by the examiner at the end of the Advisory Action mailed May 31, 2006; wherein, the examiner states that "the art of record does not disclose refusing play back of the information read from the information carrier if the second signal but no physical mark has been detected." The Examiner's Answer on page 9 further states that the

features of the appealed claims amount to no more than negative limitations of the positive recitation of *Bloom et al.* It therefore, appears that the examiner's arguments relate to anticipation through inherency.

Under the principles of inherency, if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates. *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986). The appellants assert that *Bloom et al.* do not function or include the refusal of play back of the information read from the information carrier if the second signal but no physical mark has been detected. The Examiner's Answer at the bottom of page 9 through the top of page 10 quotes *Bloom et al.* at page 1275, col. 1, lines 28-37 as follows:

"A course description of playback with a wobble is as follow. Upon insertion of a disk in a compliant drive, the drive will look for the presence of a wobble, and if present read out the 64 bits of payload. If the (compliant) MPEG decoder informs the drive that a copynever watermark is read, the drive: 1) feeds the 64 wobble bits through the one-way function F and 2) requests the MPEG decoder to read out the additional payload of the watermark. Only if the additional watermark payload and the transformed wobble bits match is playback allowed."

Note that every action within the above passage from *Bloom et al.* involves use of the wobble or information that is derived from the wobble. After quoting the above passage, the Examiner's Answer then states that the wobble reads on a physical mark. The examiner then asserts that an ordinary artisan would recognize that the statement "only if" within *Bloom et al.* is equivalent to action prevented from being taken in the absence of a wobble groove. It should be noted that the examiner is referring to piecemeal portions of both *Bloom et al.* and the appealed claims. The appellants point out that the statement within *Bloom et al.* that "only if the additional watermark payload and the transformed wobble bits match is playback allowed" is <u>not</u> equivalent to refusing play back of the information read from the information carrier if the second signal but no physical mark has been detected as defined by the appealed claims. The examiner clearly states that the wobble within *Bloom et al.* is being read as the physical mark. *Bloom et al.* do not disclose or suggest any action to take place in the absence of the wobble (i.e.

the physical mark). Furthermore, the appealed claims require the refusal of playing back information read from the information carrier if the second signal is read but no physical mark has been detected. The piecemeal approach of the rejection completely ignores that the appealed claims define the absence of the physical mark and the presence of the second signal occur to prevent playing back of information read from the information carrier.

The appellants assert that the factual analysis contained within the examiner's answer is incorrect. The Examiner's Answer on to of page 11 states that the examiner considers the watermark (watermark information/payload) disclosed by *Bloom et al.* to correspond to the second signal defined by the appealed claims. The appellants again draw the Board's attention to *Bloom et al.* at page 1275, col. 1, lines 28-37 with underlined portion provided as follows:

"A course description of playback with a wobble is as follow. Upon insertion of a disk in a compliant drive, the drive will look for the presence of a wobble, and if present read out the 64 bits of payload. If the (compliant) MPEG decoder informs the drive that a copynever watermark is read, the drive: 1) feeds the 64 wobble bits through the one-way function F and 2) requests the MPEG decoder to read out the additional payload of the watermark. Only if the additional watermark payload and the transformed wobble bits match is playback allowed."

The portion of *Bloom et al.* at page 1275, col. 1, lines 28-37 that is repeatedly quoted in the Examiner's Answer related to DVD-ROM disks. More, particularly, the watermark to which the examiner refers is not any watermark, it is a never copy watermark. A correct factual analysis of *Bloom et al.* should begin at page 1275, col. 1, lines 19 *et. seq.*, wherein the implementation of a never copy ticket is described. The ticket is implemented by means of a wobble lead in. If the wobble is detected the 64 bit payload of the wobble is read. If this 64 bit wobble payload is read by the MPEG decoder as a copy-never watermark, then the drive: 1) feeds the 64 wobble bits through the one-way function *F* and 2) requests the MPEG decoder to read out the additional payload of the watermark. Only if the additional watermark payload and the transformed wobble bits match is playback allowed. Note that all of the foregoing actions occur as a result of reading the payload of the wobble and interpreting that payload as a copy-never watermark.

The discussion of *Bloom et al.* at page 1275, col. 1, lines 28-37 pertains to implementing a ticket on a DVD-ROM disk wherein a copy-never ticket has been read within the wobble. In the single instance in which additional watermark information (payload) matches transformed wobble bits is playback allowed. The appealed claims would not exclude the public from practicing the subject matter disclosed by *Bloom et al.* at page 1275, col. 1, lines 28-37. There is no provision within the appealed claims that would prevent the public from reading a copy-never watermark contained within the wobble and allowing playback only if additional watermark payload and transformed wobble bits match.

The court in Atlas Powder Co. v IRECO, Inc., 190 F.3d 1342, 1346, 51 USPQ2d 1943, 1945 (Fed, Cir. 1999) stated that anticipation of a patent claim requires a finding that the claim at issue "reads on" a prior art reference. Here, the court cited Titanium Metals Corp. v. Banner, 778 F.2d 775, 781, 227 USPQ 773, 778 (Fed. Cir. 1985), which stated "in other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless of whether it also covers subject matter not in the prior art."

The examiner asserts that the appealed claims "read on" Bloom et al. In order to "read on" the teachings of Bloom et al., the appealed claims would have to exclude the public from practicing the subject matter taught by Bloom et al. The appealed claims have no provision to allowing playback if a wobble has been detected. The disclosure of Bloom et al. relates to the provision of a ticket for allowing playback if a copy-never watermark has been read within the wobble. The appealed claims require that in order to prevent playback, a second signal must be read from the information carrier and there has been no wobble detected. Therefore, awarding the appealed claims to the appellants could not exclude the public from practicing the teaching of Bloom et al. for performing an action based upon detection of a wobble and information contained within the wobble

The examiner may not resort to speculation or unfounded assumptions to supply deficiencies in establishing a factual basis. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA). The appellants assert that the rejection has resorted to unfounded speculation to arrive at a determination that Bloom et al. describe, expressly

or inherently, "refusing play back of the information read from the information carrier if the second signal but no physical mark has been detected." There is, simply put, no disclosure or suggestion within *Bloom et al.* for any action to take place if no physical mark is detected much less if no physical mark is detected in combination with the reading of the second signal.

The rejection of appealed claims 4-7, 10-11 and 21-22 under the provisions of 35 U.S.C. §103(a) as being unpatentable over *Glogau et al.* in view *Bloom et al.* and further in view of *Wirtz*.

The Examiner's Answer addresses these rejections beginning on page 18. The Examiner's Answer refers to the continuing discussion regarding *Bloom et al.* and the rejection of appealed claims 1-3 and 13-20. This topic has been discussed at length under the response to the examiner's Answer for the rejection of appealed claims 1-3 and 13-20 as being anticipated under the provisions of 35 U.S.C. §102(a) by *Bloom et al.* For the sake of brevity, the Board is directed to this discussion for references made to *Bloom et al.* hereinbelow.

Towards the bottom of page 18, the Examiner's Answer details a portion of appellants' Appeal Brief. The examiner avers that the appellants return to the discussion regarding *Bloom et al.* This is not the interpretation that was intended by the appellants. The portion detailed by the examiner is that the appealed claims can not be read so broadly such that the wobble groove is interpreted as the first signal. In order to explain this, it was necessary to return to the independent claims. The independent claims define subject matter for reading out information from an information carrier, including a first signal, or detecting a second signal logically embedded in the first signal, detecting a physical mark used for storing at least part of the information on the information carrier, and for refusing play back of the information read from the information carrier if the second signal but no physical mark has been detected. The first signal is in the information read, the second signal within the first signal and a physical mark for storing information on the information carrier. The information that is read out will always contains a first signal but there is not necessarily a physical mark.

The Examiner's Answer on page 19 states that the second signal is embedded in the first signal indicating the physical mark used for storing at least part of the information. This is also a mischaracterization. The first signal does not indicate the physical mark.

On the bottom of page 18, the Examiner's Answer again discusses *Bloom et al*. This topic has been discussed at length under the response to the examiner's Answer for the rejection of appealed claims 1-3 and 13-20 as being anticipated under the provisions of 35 U.S.C. §102(a) by *Bloom et al*. For the sake of brevity, the Board is directed to this discussion for a complete discussion of *Bloom et al*. as it relates to the appealed claims. Briefly stated, *Bloom et al*. relates to a ticket only allowing playback in the case wherein a wobble is detected, a copynever watermark is read and additional watermark payload and transformed wobble bits match. In contradistinction, the appealed claims related to only preventing playback if a second signal is read and no wobble detected.

The statements on page 20 of the Examiner's Answer clearly illustrate a mischaracterization of *Bloom et al.* and the appealed claims. *Bloom et al.* teach a ticket contained within the wobble. The appealed claims defines subject matter for preventing playback if the second signal (as defined on page 3, lines 3-7 of the specification as originally submitted to be indicative of the existence of the physical mark) is read present without the physical mark being detected. There is no disclosure or suggestion within *Bloom et al.* for any action if the ticket contained within wobble (that which the examiner reads as the second signal) exists and the wobble is not detected.

Page 21 of the Examiner's Answer discuss Wirtz. The appellants would like to direct the Board to this discussion to illustrate the fundamental differences between Wirtz and the appealed claims. The examiner cites Wirtz at col. 2, lines 43-47. "The watermark is not lost when the signal is re-encoded and copied on a recordable disc. A player will not reproduce the copy because the watermark no longer corresponds with the 'wobble key' of the new disc." The appealed claims relate to a player not reproducing if there is no wobble detected and the second signal is read.

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)." The Appeal Brief clearly pointed out that not only does the rejection not disclose or suggest the combination made by this rejection, but also that the combination does not teach or suggest all the claim limitations. The appealed claims defines subject matter for preventing playback if the second signal is read present without the physical mark being detected; which is not found within any of the cited references.

The Examiner's Answer on pages 21 et seq., extensively argues that Glogau et al. teach the first signal in which a second signal is logically embedded. The appellants assert that the rejection is applying impermissible hindsight using the elements of the appealed claims as a blueprint from which to pick and choose the elements from prior art references. Glogau et al. teach to use an image to transport and exchange data. The secret message is embedded within the image. See Glogau et al. page 5, lines 1-31. The appellants assert the examiner has used impermissible hindsight in rejecting the appellants' claims. See W.L. Gore & Associates v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984); In re Rothermel, 276 F.2d 393, 396, 125 USPQ 328, 331 (CCPA 1960).

The Supreme Court stated that it "must also keep in mind that a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does." KSR Int'l. Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396

(2007). A person skilled in the would not have viewed *Glogau et al.* for potential use in combination with *Bloom et al.* to control reading data off an information carrier.

Conclusion

In summary, the examiner's rejections of the claims are believed to be in error for the reasons explained above. The rejections of each of claims 1-7 and 10-22 should be reversed.

Respectfully submitted,

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